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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,034	09/19/2001	Kuang Hsun Hsieh	GGI0037-US	8294

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EXAMINER

CAO, CHUN

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,034

Applicant(s)

HSIEH, KUANG HSUN

Examiner

Chun Cao

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-4 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

Drawings

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by McDermott et al. (McDermott), U.S. patent no. 5,815,693.

As per claim 1, McDermott teaches a power management method for hand-held information processing apparatus [fig. 13; col. 1, lines 49-56], comprising the following steps:

creating an idle thread when a central processing unit of said hand-held information processing apparatus is in an idle status [col. 17, lines 14-17; col. 18, lines 5-11];

counting a number of times said idle thread has been executed [col. 18, lines 5-11];

comparing said counted number of times of execution of said idle thread with at least a high and a low default value [col. 17, lines 19-22; col. 18, lines 12-17]; and

raising or lowering an execution frequency of a system of said hand-held information processing apparatus when said counted number of times of execution of said idle thread is larger than said at least one high default value or smaller than said at least one low default value, respectively [fig. 13; col. 18, lines 12-37].

As per claim 3, McDermott teaches of execution frequency of said system is a frequency of said central processing unit and peripheral driving devices of said hand-held information processing apparatus [col. 16, line 55-col. 17, line 12; col. 18, lines 12-32].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2115

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott et al. (McDermott), U.S. patent no. 5,815,693 in view of Reneris (Reneris), U.S. patent no. 5,784,628.

As per claim 2, McDermott teaches a power management method for hand-held information processing apparatus [fig. 13; col. 1, lines 49-56, comprising the following steps:

creating an idle thread when a central processing unit of said hand-held information processing apparatus is in an idle status [col. 17, lines 14-17; col. 18, lines 5-11];

counting a number of times said idle thread has been executed [col. 18, lines 5-11];

comparing said counted number of times of execution of said idle thread with at least a high and a low default value [col. 17, lines 19-22; col. 18, lines 12-17]; and

raising or lowering an execution frequency of a system of said hand-held information processing apparatus when said counted number of times of execution of said idle thread is larger than said at least one high default value or smaller than said at least one low default value, respectively [fig. 13; col. 18, lines 12-37].

McDermott does not explicitly teach of detecting and verifying whether peripherals of said hand-held information processing apparatus are still in a busy status; temporarily stopping said peripherals that are not in said busy status, and awaiting until

Art Unit: 2115

said peripherals that are in said busy status having completed execution of their respective works.

Reneris teaches of detecting and verifying whether peripherals of said hand-held information processing apparatus are still in a busy status; temporarily stopping said peripherals that are not in said busy status, and awaiting until said peripherals that are in said busy status having completed execution of their respective works [col. 10, line 58-col. 11, line 23].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of McDermott and Reneris because they are both directed to a power saving system, and the specify teachings of Reneris stated above would improve the reliability of McDermott's system by avoiding system crash or data lost and corrupt.

As per claim 4, McDermott teaches of execution frequency of said system is a frequency of said central processing unit and peripheral driving devices of said hand-held information processing apparatus [col. 16, line 55-col. 17, line 12; col. 18, lines 12-32].

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tejima et al., JP patent no. 62-63346, teaches a method for measuring idle time of a processor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chun Cao

Nov. 23, 2004